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EXAMINER

HOFFMANN, JOHN M

ART UNIT	PAPER NUMBER
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1791

NOTIFICATION DATE	DELIVERY MODE
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01/14/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No. 10/796,099	Applicant(s) STURM ET AL.	
	Examiner John Hoffmann	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-8, 15, 16, 18-35 and 40-42 is/are pending in the application.
- 4a) Of the above claim(s) 22-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-8, 15, 16, 18-21 and 40-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2008 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/19/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/22/2008 has been entered.

Election/Restrictions

Newly amended claims 22-35 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claim 22 requires that the supplied polycondensate is molten. However claim 29 as originally presented, searched and examined is directed to supplying solid polycondensate. These are two mutually exclusive species. For the Office to now have to search and examine the new specie where a molten polycondensate is supplied would place an undue burden on the Office.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 22-35 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Feature “7”. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Newly amended [0015] refers to smooth wedge surface as being 2 and Az. However, figure 2 indicates that Az and 2 are two different things. It shows 2 being Am, and 7 being Az. It is unclear whether the drawing is correct, or the specification.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “screw elements” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

See also MPEP 608.02(v).

Response to Amendment

The amendment filed 12/19/2008 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: that the twin/triple screw elements are “flighted” and that feature 2 is the wedge surface.

The amendment filed 7/7/2008 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Figure 6 shows Di to be an external diameter. However [0006] and elsewhere indicates that Di is an internal diameter. There is no support for Am being part of the process space as shown in figure 2: it shows Am as being completely devoid of free space.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 40-42 , 2-8, 15, 16, and 18-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There is no support for the limitation regarding "twin flighted screw elements". Examiner could find no literal support for this language. Examiner understands that in the technology area there are "twin screw" extruders that have two screws (see for example 4540592) and then there are "twin flight" screws (i.e. a screw with two flights - a double helix, see 6234659 for instance.) Claim 1 as originally filed refers to "twin screw elements" – but there is no indication as to whether there are twin screws or twin elements (e.g. flights) of a single screw. There is no discussion as to what these elements are.

As to implies support: there is none. Whereas claim 1 as originally filed refers to "twin screw elements", there is no indication that they are flighted. Rather, it would seem to examiner that the 'elements' themselves are the flights. As Examiner now understands the terminology:

There is no support for Di being the inner diameter at a screw base. [0006] indicates that it is an "internal" diameter. What is shown as Di in figure 2 is an external surface of the screw. Whereas it is "internal" to the extruder, Da is also internal to the

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extruder. It would seem that the only "internal" diameter of the screw would correspond to the innermost shaft (not labeled) onto which the helical part of the screw is set.

Claim 16: there is no support for the limitation that the screws are tightly intermeshing.

There is no support for the "self-cleaning screws" of claim 40. From [00024] and elsewhere, it is the elements that are self-cleaning. Examiner could find nothing that indicates the screws are self-cleaning.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 40-41, 2-8, 15, 16, and 18-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15: there is no antecedent basis for "the elastomer" – it makes it unclear if claim 40 should be interpreted as being limited to the use of only elastomers.

Claim 41: there is no antecedent basis for "the product to be processed" – it is unclear if it is the product of line 3 or the end product of the method.

Claim 4: there is confusing antecedent basis for D_a/D_i - it is unclear if it related to the condition (e.g. "when D_a/D_i is...") fraction of claim 40, or if it requires the screws actually used in the process to have the value. It is unclear what is meant by the value "is 1.5 to 1.63". The value D_a/D_i is generally a single value. It is unclear if applicant

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intends it to be a value within the range of 1.5 to 1.63, or if it is suppose to be considered a ratio 1.5:1.63, or whether it means that all of the ratios are required by a non-constant D_i and/or non-constant D_a , or if there is a typographical error and "to" really should be "or". The same problem exists for the last line of claim 40. Compare also to claim 5 which sets forth an inequality. That applicant uses such an expression for claim 5, such is indicative that applicant did NOT intend claim 4 fraction to be a value within a range of 1.5-1.63 because different language is used.

Claim 5: there is confusing antecedent basis for "screw elements" - it is unclear if/how they relate to the screw elements of claim 40.

The term "screw elements" is indefinite as to its meaning. There is no explanation/description of the elements. Since the claims requires both "screws" and "screw elements" it is implied that they are two different things. However [00024] and elsewhere indicate that the screw elements are what are self-cleaning, what is claimed in claim 40 is that the screws are self-cleaning. This somewhat implies they are the same thing. Also, the language "twin-flighted" further connotes that the screws and the screw elements are the same things. *Karlin Tech. Inc. v. Surgical Dynamics, Inc.*, 177 F.3d 968, 971-72, 50 USPQ2d 1465 (Fed. Cir. 1999) (recognizing "the common sense notion that different words or phrases used in separate claims are presumed to indicate that the claims have different meanings and scope.").

The claim is confusing because, as indicated by [00015], as presently amended and figure 2, A_z (a smooth surface) is (or includes) a non-existent (phantom surface). It

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is unclear whether one should consider Az to be an actual surface only, or if it includes the non-real surface. Further, since the space between two adjacent shafts is an intersection between two volumes, it is unclear if one counts the volume twice, or once.

Claim 6 has an improper Markush group – or if it is not intended to be a Markush group - it is unclear what is meant. A proper Markush group recites: at least one member of the group consisting of...and.... Claim 6 does not indicate that the list of two items is “consisting of” the members. Thus it is not a proper Markush group.

Alternatively: it is unclear if the group is “comprising” the two members.

Claim 16:

The language “tightly” is a “word of degree” which is imprecise unless a definition or guideline has been set forth in the specification or the term is otherwise well known in the art. See Seattle Box Co. v. Industrial Crating and Packing, Inc., 731 F.2d 818, 826, 221 USPQ 568, 574 (Fed. Cir. 1984). However, there is no evidence in application (nor is Examiner aware of any evidence) that the words “tightly” have any art-recognized meaning. Nor is there any guidance or definition in the specification that would allow one of ordinary skill in the art to understand the meaning of the words “tightly”.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 40, 2-5, 15,16, 42 and 18-21 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Heidemeyer 6042260.

See col 1, lines 10-25 of Heidemeyer. The disclosure of “multi-shaft” reasonably anticipates having at least 4 screws as claimed. Alternatively, it would have been obvious to have at least 4, depending upon the scale of the process. It is generally not invention to have multiple parts for multiplied effect.

From MPEP 2144.04

B. Duplication of Parts

In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) (Claims at issue were directed to a water-tight masonry structure wherein a water seal of flexible material fills the joints which form between adjacent pours of concrete. The claimed water seal has a "web" which lies ** in the joint, and a plurality of "ribs" ** >projecting outwardly from each side of the web into one of the adjacent concrete slabs. <The prior art disclosed a flexible water stop for preventing passage of water between masses of concrete in the shape of a plus sign (+). Although the reference did not disclose a plurality of ribs, the court held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced.).

As to the ratios: Heidemeyer's range of 1.18 to 1.25 is not within the 1.3-1.7 range. Claim 40 sets forth requisite ratios "when" D_a/D_i is 1.3 to 1.7. The claim does

not limit those situations where D_a/D_i is not within the claimed range. The claims do not require a ratio within the claimed range.

It is deemed that the surface would be sufficiently smooth to perform the method. The claim fails to indicate the degree of smoothness, thus one can consider any degree of smoothness which permits the proper functioning thereof would be "smooth". Alternately it would have been obvious to have the surfaces of a particular tolerance so that one makes sure that the parts of the apparatus fit together. The rest of the limitations are clearly met.

Claims 2-3, see col. 1, lines 22-30. It would have been obvious to have torque up to 10 NM/cm³ - depending upon how much material one makes. It would have been obvious to push the device up to the 10 Nm/cc, when one needs to make even more material.

Claims 4-5 do not specify whether the fraction, ratio and elements are those of the extruder, or if they are of the conditional "when D_a/D_i is 1.3 to 1.7". Of all the possible reasonable interpretations, Examiner is required to use the broadest.

The PTO gives a disputed claim term its broadest reasonable interpretation during patent prosecution. Hyatt, 211 F.3d at 1372. The "broadest reasonable interpretation" rule recognizes that "before a patent is granted the claims are readily amended as part of the examination process." Burlington Indus. v. Quigg, 822 F.2d 1581, 1583 (Fed. Cir. 1987). Thus, a patent applicant has the opportunity and responsibility to remove any ambiguity in claim term meaning by amending the application. In re Prater, 415 F.2d 1393, 1404-05 (CCPA 1969). Additionally, the broadest reasonable interpretation rule "serves the public interest by reducing the possibility that claims, finally allowed, will be given broader scope than is justified." In re Am. Acad. of

Sci. Tech. Ctr., 367 F.3d 1359, 1364 (Fed. Cir. 2004) (quoting In re Yamamoto, 740 F.2d 1569, 1571-72 (Fed. Cir. 1984)).

Examiner finds that interpreting claims 4-5 as relating to the conditional (of claim 40) is the broadest. Since Heidemeyer does not meet the conditional, the other limitation fail to define over Heidemeyer.

Claim 15, refers to “the elastomer”. However there is no antecedent basis for this. It is deemed that this relates to if there is an elastomer. Heidemeyer has no elastomer, thus the conditional is not met. In other words: the claim only serves to limit those embodiments where an elastomer is used, but not embodiments where there is no elastomer.

Claim 16: see col. 4, lines 62-64.

Claim 18: Col. 2, lines 66-67 indicate that the apparatus is at an elevated temperature. Thus the temperature is inherently controlled, based on the material input, energy input, and heat capacity. It is noted that “control” can encompass a mental step. For example, one can decide that the material should be at 350 C, and then monitor the temperature, and make energy adjustments accordingly. However, such is not required. For example, one can control a faucet without ever measuring the water flow. Examiner notes that mental steps are not manipulative. If a process is at 350 C, it can be impossible to tell whether a mental decision was made to set the temperature at 350, or whether it was inherent result of other input parameters. Examiner’s point: the claimed control of temperature does not require any manipulative steps. If

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applicant wishes to patent detail controls over the recited process, the process steps must be positively recited. See Seagram & Sons Inc. vs Marzall, 84 USPQ 180.

The core (of the screw) and the housing are both stationary before and after the extrusion.

Claim 19: it is deemed that they are controlled separately. The housing has a large external surface which permits heat flow to the ambient. The core does not. Applicant does not describe the separate control. It would seem that applicant envisioned adding or subtracting heat/energy to the core or housing in a manner which is not given to the other. For example using electrical heat to the housing, but not to the core - or by applying a different electrical current or voltage to the core. Or a separate water cooled structure. The cooling to the ambient of the housing would serve to yield the final temperature of the housing, such is separate for the core - which would not direct heat flow to the ambient.

Claim 20: see figure 3 which shows at least three segments. Each would have separate heat flows.

Claim 21: it would have been obvious to arrange the shafts in whatever arrangement is most convenient. **From MPEP 2144.04**

B. Changes in Shape

In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966) (The court held that the configuration of the claimed disposable plastic nursing container was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed container was significant.).

Claim 42: See figure 4 which shows two screws rotating in the same direction – it would have been obvious to have all of the screws rotate in the same direction.

Claims 6-8 are rejected under 35 U.S.C. 103(a) as obvious over Heidemeyer 6042260 as applied to claim 40, above, and further in view of Nosker 5951940.

Heidemeyer does not disclose the materials extruded. Nosker teaches to extrude waste PET. It would have been obvious to use the Heidemeyer apparatus to recycle PET soda bottles, since such would be an inexpensive material and would serve to reduce landfills. Claims 6-8 are clearly met

Claim 21 is rejected under 35 U.S.C. 103(a) as obvious over Heidemeyer 6042260 as applied to claim 40, above, and further in view of Blach 5836682

Heidemeyer does not teach the ring arrangement. Blach teaches such results in a much greater throughput (col. 1, lines 14-17. It would have been obvious to have shafts in a ring as disclosed by Blach so as to have a much greater throughput.

Claim 41 is rejected under 35 U.S.C. 103(a) as obvious over Heidemeyer 6042260 as applied to claim 40, above, and further in view of Ullrich 3963679.

Heidemeyer does not disclose elastomers. However, Heidemeyer's process is used for processing resins (col.1, line 16). Ulrich discloses as superior reaction for making elastomers that includes multi-shaft extruders (col. 9, line 55). Ullrich method is superior because it eliminates the need to size reduce or subsequent processing (col. 3, lines 31-34. It would have been obvious to use the Ullrich composition/resins (e.g. col 6, lines 36-38) as the Heidemeyer resins for the advantages that Ullrich teaches.

Alternatively, it would have been obvious to improve the Ullrich process by using the Heidemeyer apparatus for the advantages that Heidemeyer espouses.

Response to Arguments

Applicant's arguments filed 12/19/2008 have been fully considered but they are not persuasive.

In regards to the new matter rejection, it is argued that the internal diameter is internal to the external diameter. Applicant also refers to an Office action. The relevance of the arguments is not understood. It is unclear how such a description shows that such is not new matter. The issue of whether something is definite or not is largely irrelevant as to whether something is new matter. Examiner fails to see how Di is internal to Da. Applicant's proposed figure 2 shows Di as according to a hidden-line circle - it is clear that it is axially off-set from the spiral, and not internal thereto.

Applicant also refers to figure 2, [0015] and [0006]. Examiner fails to see how this overcomes the finding of a prima facie case of new matter. The response does not set out any error in the finding or how the application as filed provides support for the amendments to the specification and drawings.

It is argued that the support for the two flighted screw elements can be found in two German Applications and that the shanks are tightly intermeshing. No evidence is supplied to support these arguments.

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Attorney argument is not evidence unless it is an admission, in which case, an examiner may use the admission in making a rejection. See MPEP § 2129 and § 2144.03 for a discussion of admissions as prior art.

The arguments of counsel cannot take the place of evidence in the record. In re Schulze, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); In re Geisler, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) ("An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a prima facie case of obviousness."). See MPEP § 716.01(c) for examples of attorney statements which are not evidence and which must be supported by an appropriate affidavit or declaration.

It is noted, Examiner does not read or understand German.

It is argued that [0006] and figure 2 fulfill the enablement requirement that Di is the inner diameter at the screw base. This is not very relevant. There is no enablement rejection. The rejection is based on the written description requirement. The application as filed must reasonably support the invention as now claimed. Applicant's reliance on [0006] and figure 2 is misplaced because they are newly added.

It is argued that claim 6 is clear as written, however no basis is given to support this. Nor is there any evidence which tends to show that it means what applicant says it means. As set forth in the rejection it is unclear whether the list is consisting of contaminated or moist, or if it is a member of the group comprising contaminated or moist. Applicant has not pointed out any error in this.

Regarding the prior art, it is argued that none of the references disclose a relationship of the ratios when a twin flighted screw element diameter ratio of 1.3 to 1.7 is utilized. As indicated above, such is not necessary for anticipation. The claim does not limit the situations where the ratio is outside the 1.3 to 1.7 range.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John Hoffmann
Primary Examiner
Art Unit 1791

/John Hoffmann/
Primary Examiner, Art Unit 1791